

CLAIMS

WHAT IS CLAIMED IS:

1. A method for adjusting the selecting out of winnowings in the manufacture of smokable products, wherein:
 - a) the current size distribution of a stream of tobacco particles passing a measuring point, per unit of time, is detected; and
 - b) is compared with a settable nominal size distribution; wherein
 - c) an arrangement for separating the winnowings is continually adjusted, depending on the result of said comparison.
2. The method as set forth in the preceding claim, wherein said smokable products are cigarettes.
3. The method as set forth in claim 1, wherein the current size distribution of a stream of separated winnowings, of a stream of usable tobacco particles and winnowings or of a stream of usable tobacco particles alone is detected and compared with a corresponding, settable nominal size distribution.
4. The method as set forth in claim 1, wherein said current size distribution is determined by detecting the dimensions of the tobacco particles in the transport direction at said measuring point.
5. The method as set forth in claim 4, wherein the dimensions of the tobacco particles are detected using a fine-beam light barrier.
6. The method as set forth in claim 5, wherein the volume and/or the mass flow rate of the tobacco particles passing the measuring point is determined by detecting the dimensions of the tobacco particles in the transport direction.

7. The method as set forth in claim 1, wherein the current size distribution and the nominal size distribution are compared on the basis of their peaks or the overall area of the corresponding curve.
8. The method as set forth in claim 1, wherein the current size distribution and the nominal size distribution are compared on the basis of the ratio between the size distributions for the winnowings and for the usable tobacco particles.
9. The method as set forth in claim 1, wherein the spatial position of separating units for the winnowings is set, depending on the result of said comparison.
10. The method as set forth in claim 9, wherein an impact sheet serving as a separating unit is continually adjusted using an electric motor.
11. The method as set forth in claim 10, wherein said impact sheet is an impact metal sheet.
12. The method as set forth in claim 10, wherein said electric motor is a servo or step motor.
13. The method as set forth in claim 10, wherein said electric motor is directly attached to said impact metal sheet.
14. The method as set forth in claim 10, wherein said electric motor is coupled to said impact metal sheet via Bowden wire connections, said impact metal sheet being biased into a defined position via springs.
15. The method as set forth in claim 9, wherein the stream of air serving to separate an initial stream of tobacco particles into the usable particles and winnowings is adjusted, depending on the result of the comparison.
16. The method as set forth in claim 15, wherein the stream quantity and/or the pressure of the stream of air is adjusted.

17. The method as set forth in claim 9, wherein the velocity of the conveying medium for the stream of tobacco particles is adjusted, depending on the result of the comparison.
18. The method as set forth in claim 17, wherein cylinders, belts or streams of air are used as said conveying medium.
19. The method as set forth in claim 18, wherein the velocity of the stream of air serving as the conveying medium winnowings is adjusted by changing the stream quantity and/or the pressure.
20. The method as set forth in claim 1, wherein the nominal size distribution is determined by detecting the change in the ratio of the size of the winnowings to the size distribution of the usable tobacco particles and optimizing said ratio by adjusting the arrangement for separating the winnowings.
21. A device for adjusting the selecting out of winnowings in the manufacture of smokable products, comprising:
 - a) a sensor for detecting the current size distribution of tobacco particles passing said sensor, per unit of time;
 - b) an arrangement for inputting a nominal size distribution;
 - c) an arrangement for comparing said current size distribution with said settable nominal size distribution; and
 - d) an adjusting arrangement for setting an arrangement for separating the winnowings, depending on the output signal of said comparing arrangement.
22. The device as set forth in claim 21, wherein said smokable products are cigarettes.
23. The device as set forth in claim 21, comprising a fine-beam light barrier comprising two fine light beams for detecting the current size distribution, an adjusting arrangement for an

impact metal sheet for separating the stream of tobacco particles into winnowings and usable tobacco particles, and a servo or step motor for adjusting said impact metal sheet.